

# Samantha Torres

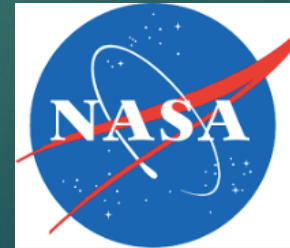
Bachelors of Science in Biological Anthropology (2016)  
University of California, Riverside

Masters in Public Health (2019)  
San Francisco State University

Globus/Schreurs Lab  
Bone and Signaling Lab  
NASA Ames Research Center

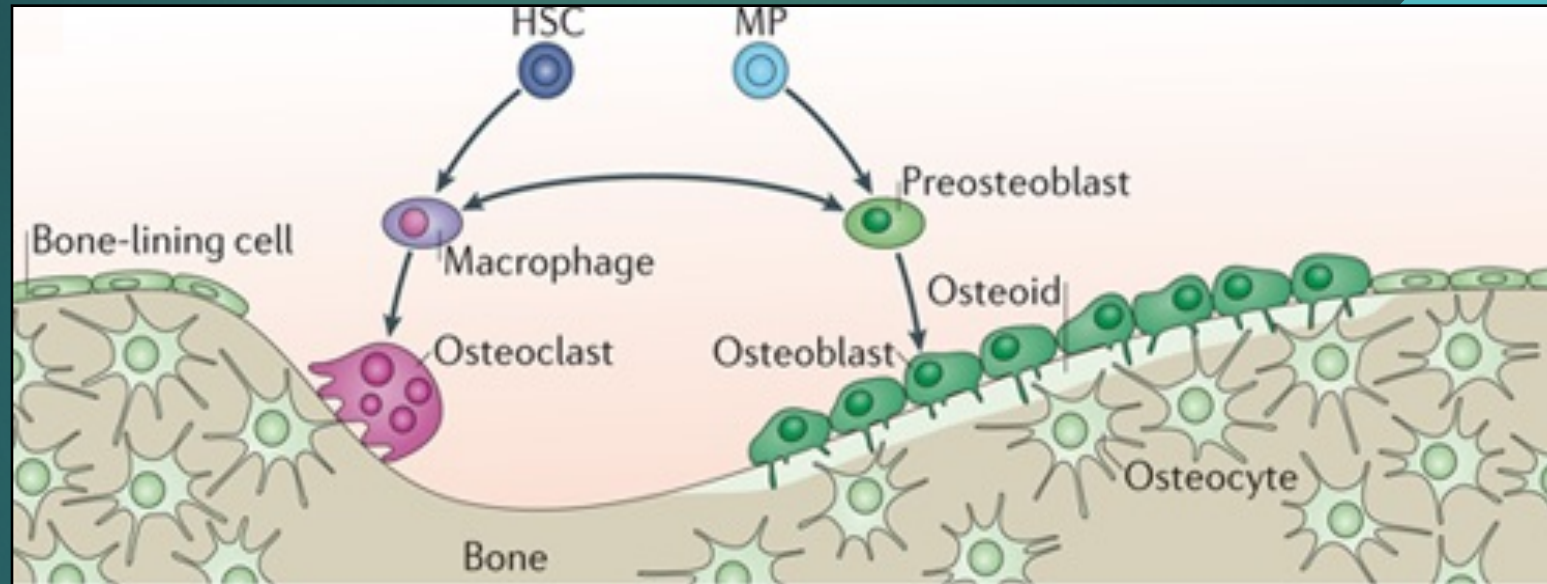


**Blue Marble Space**  
Institute of Science

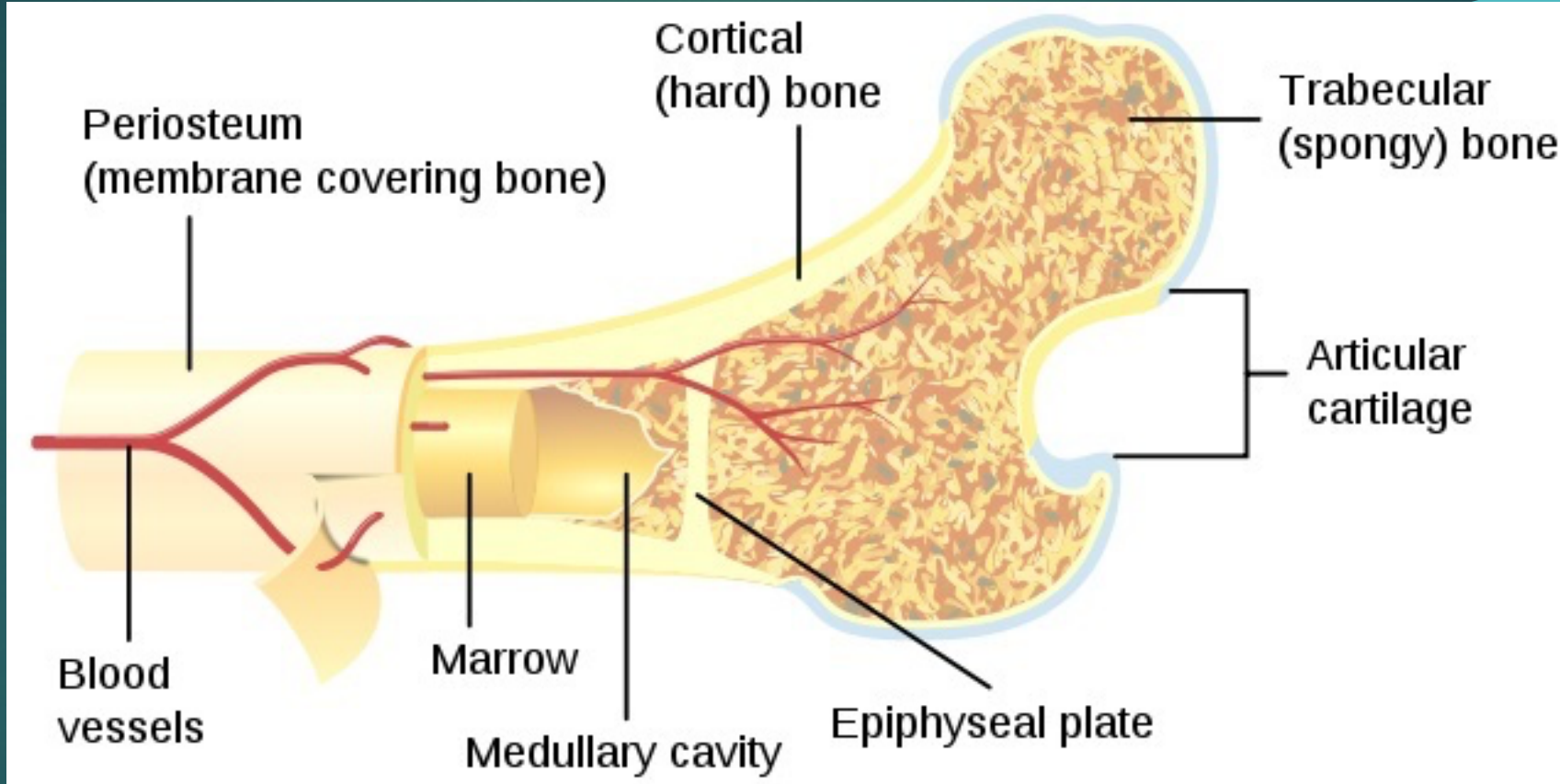




# Bone Biology

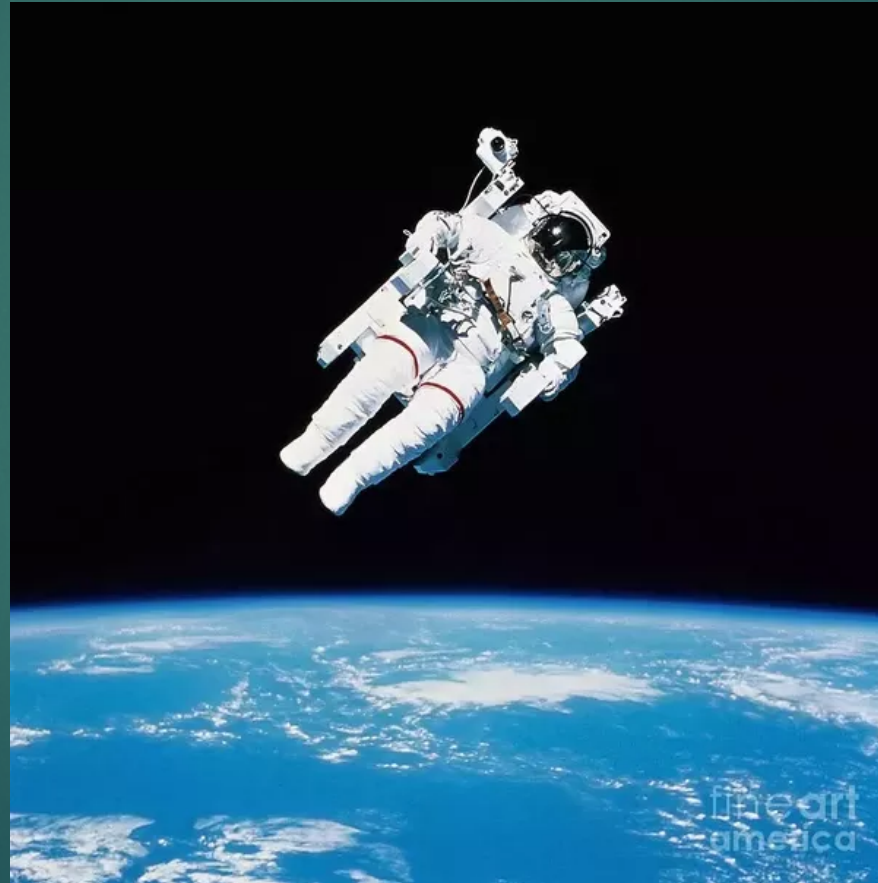


# Bone Structure

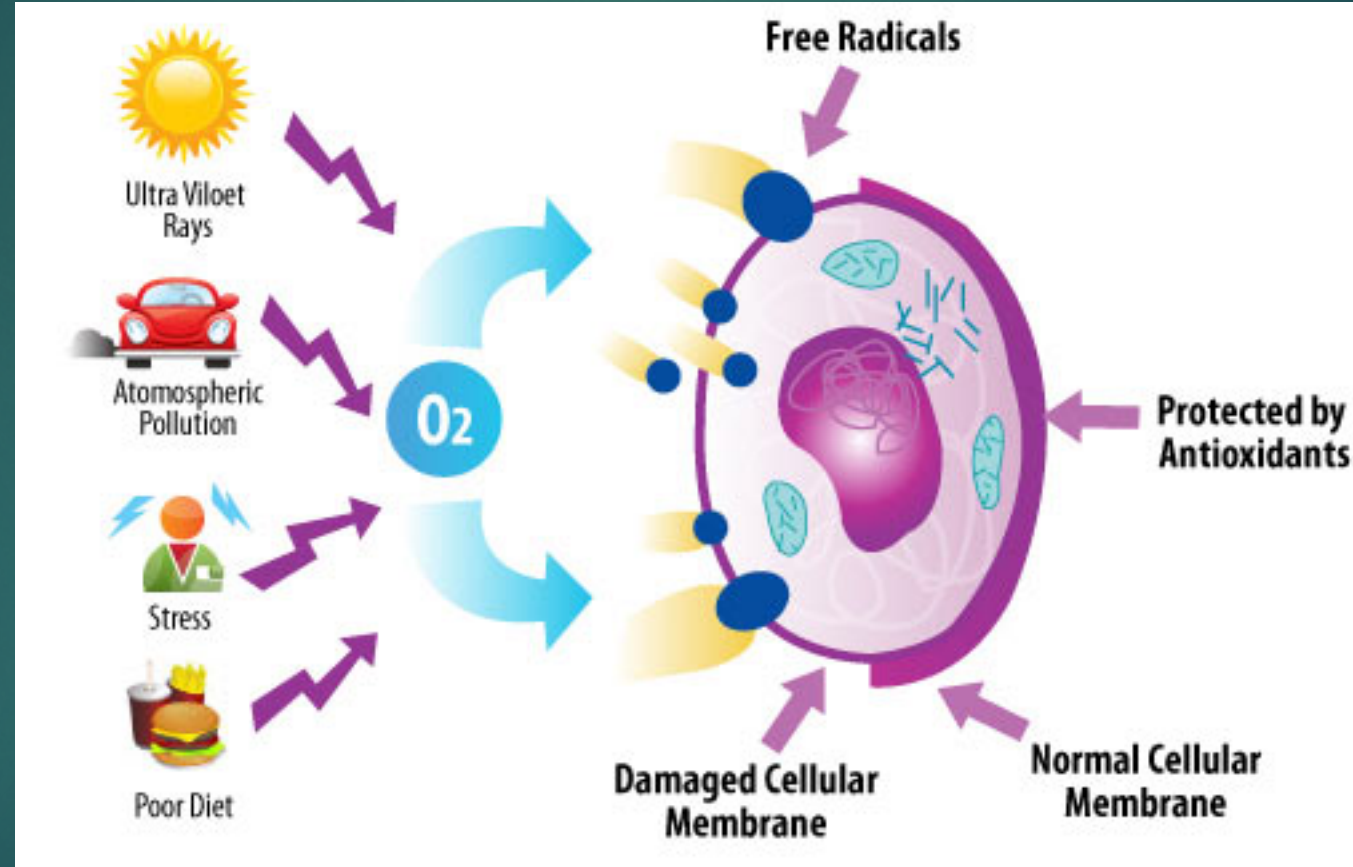




# Space Environment: Radiation and Microgravity



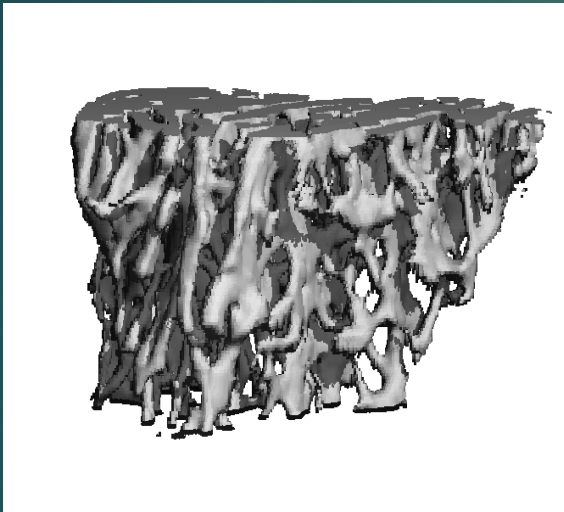
# Oxidative Damage





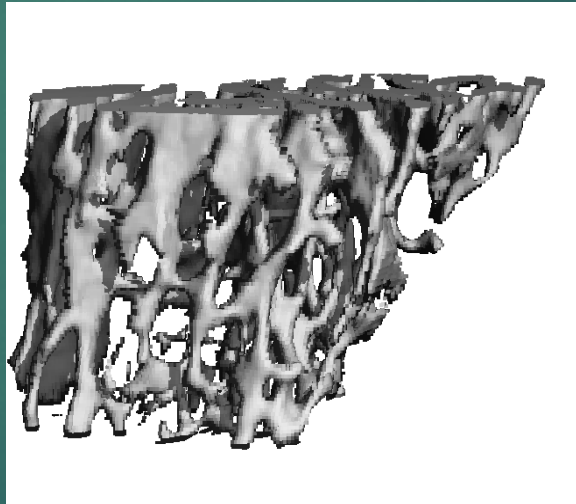
# Bone Loss in Simulated Space Environment

Control (ambulatory)



vs

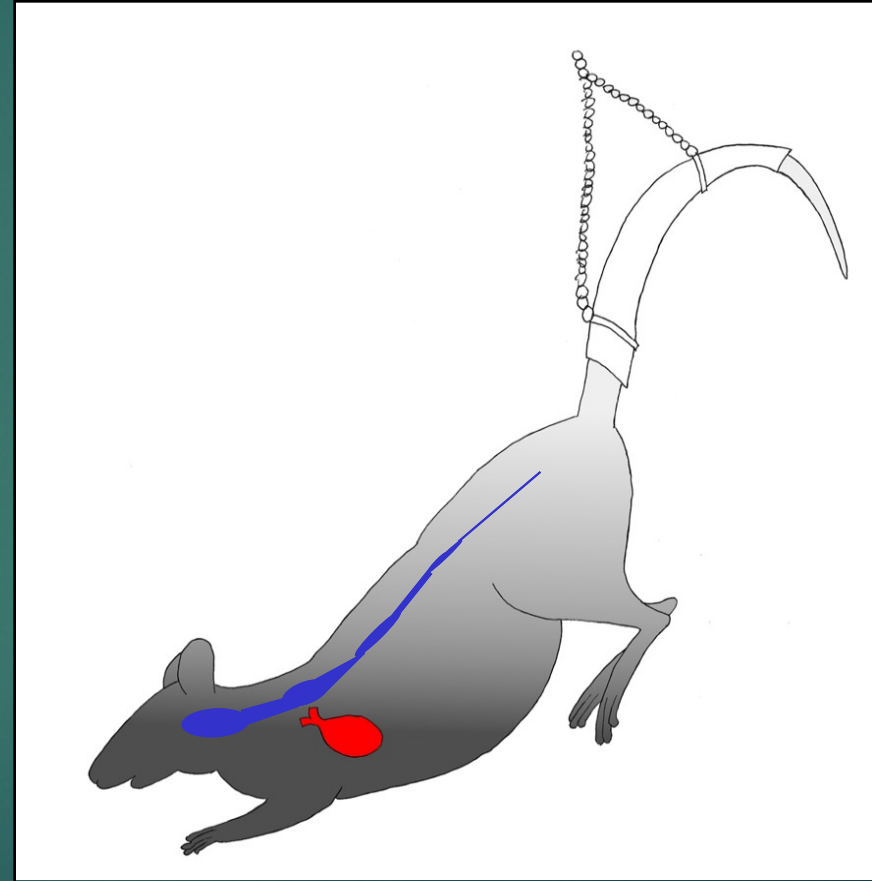
Hindlimb Unloading (HU)



Representative microcomputed tomography images of rodent tibia (cancellous region) before and after hindlimb unloading.

# Hindlimb Unloading

Hindlimb Unloading (HU)  
is a ground-based model  
for musculoskeletal  
disuse and microgravity  
simulation





# mCAT Mice!



# Implications Here on Earth



Cancer patients receiving  
radiotherapy



Bedridden patients



# Implications Here on Earth

